

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 19593 - L2 Version 1
Chandra X-Ray Center

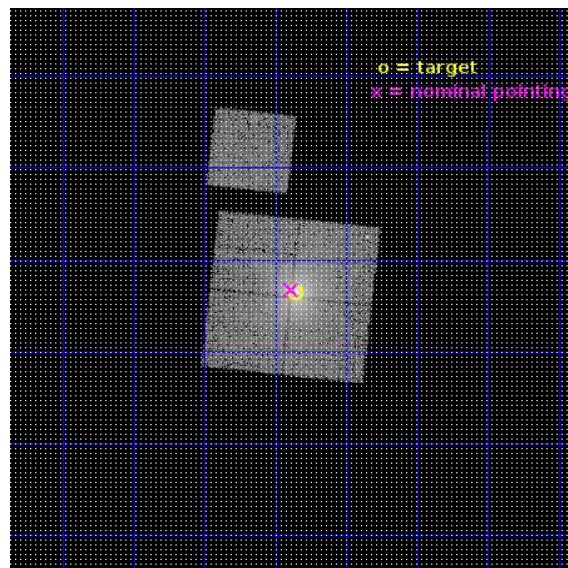
L2 Processing Date : Nov 27 2017

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

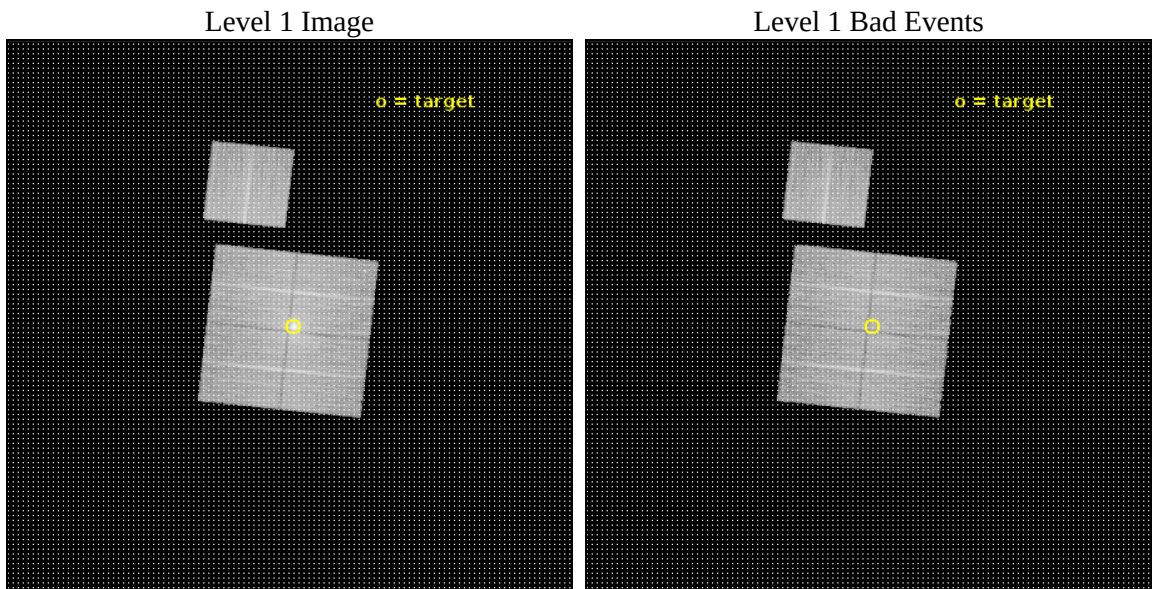
seq_num	801682	Sequence number
obs_id	19593	Observation id
title	Two Clusters with Short Central t_cool but no Signatures of Cooling Gas - Why Hasn't Cooling Commenced?	Proposal title
observer	Michael Hogan	Principal investigator
object	EXO0422-086	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	66.464167	Observer's specified target RA [deg]
dec_targ	-8.559611	Observer's specified target Dec [deg]
ra_nom	66.47185375657	Nominal RA [deg]
dec_nom	-8.5546508570611	Nominal Dec [deg]
roll_nom	6.2098395105371	Nominal Roll [deg]
revision	1	Processing version of data
ontime	20063.159124255	Sum of GTIs [s]
livetime	19801.019180014	Livetime [s]
ontime0	20063.159184217	Sum of GTIs [s]
ontime1	20063.159144282	Sum of GTIs [s]
ontime2	20063.159164071	Sum of GTIs [s]
ontime3	20063.159124255	Sum of GTIs [s]
ontime6	20066.300154448	Sum of GTIs [s]
l2events	101351	Number of level 2 events



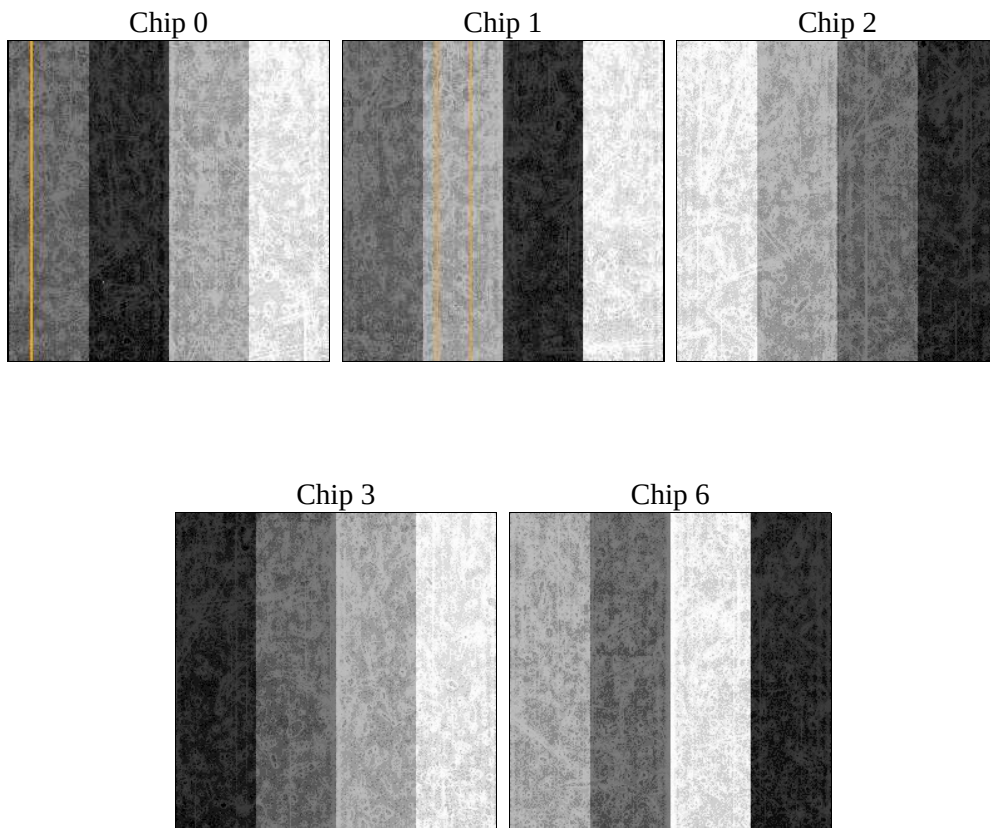
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	20063.159124255	Sum of GTIs [s]
caldsver	4.7.6	 	ontime0	20063.159184217	Sum of GTIs [s]
date	2017-11-27T17:24:02	Date and time of file creation	ontime1	20063.159144282	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	20063.159164071	Sum of GTIs [s]
			ontime3	20063.159124255	Sum of GTIs [s]
			ontime6	20066.300154448	Sum of GTIs [s]
			l1events	697446	Number of level 1 events

2.1.4 Events

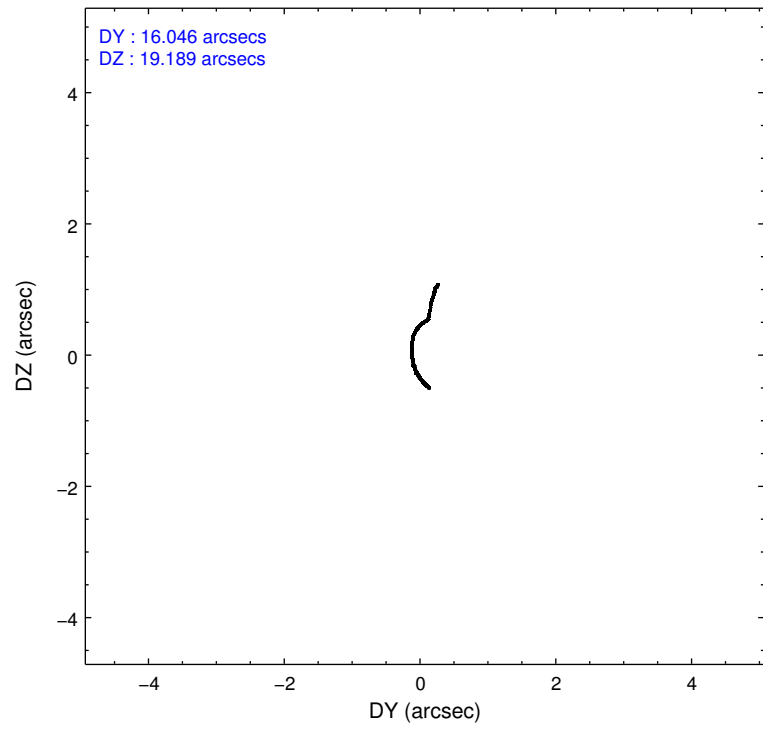
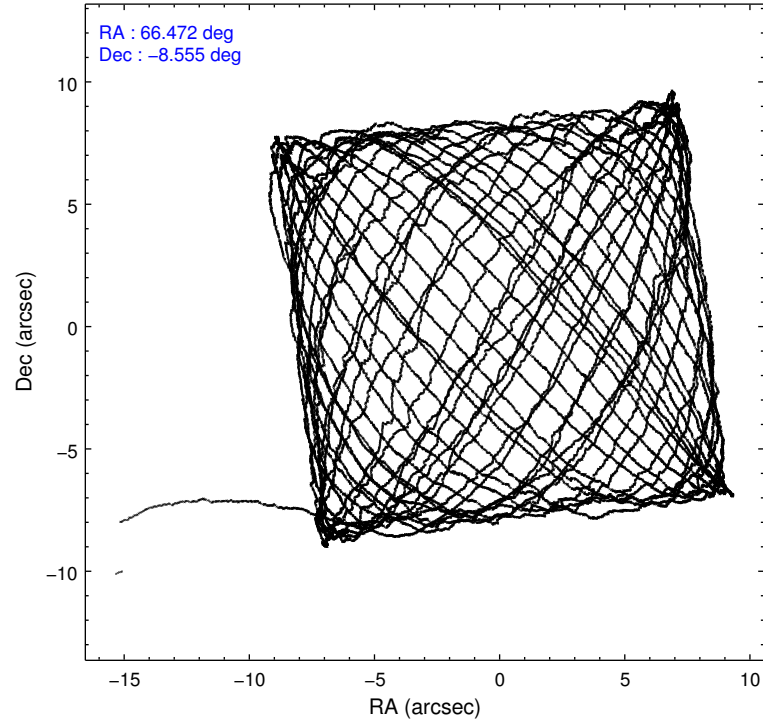
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	124582	136179	144795	153004	138886
rejected events	104388	112463	123159	118107	123693
rejected %	83%	82%	85%	77%	89%

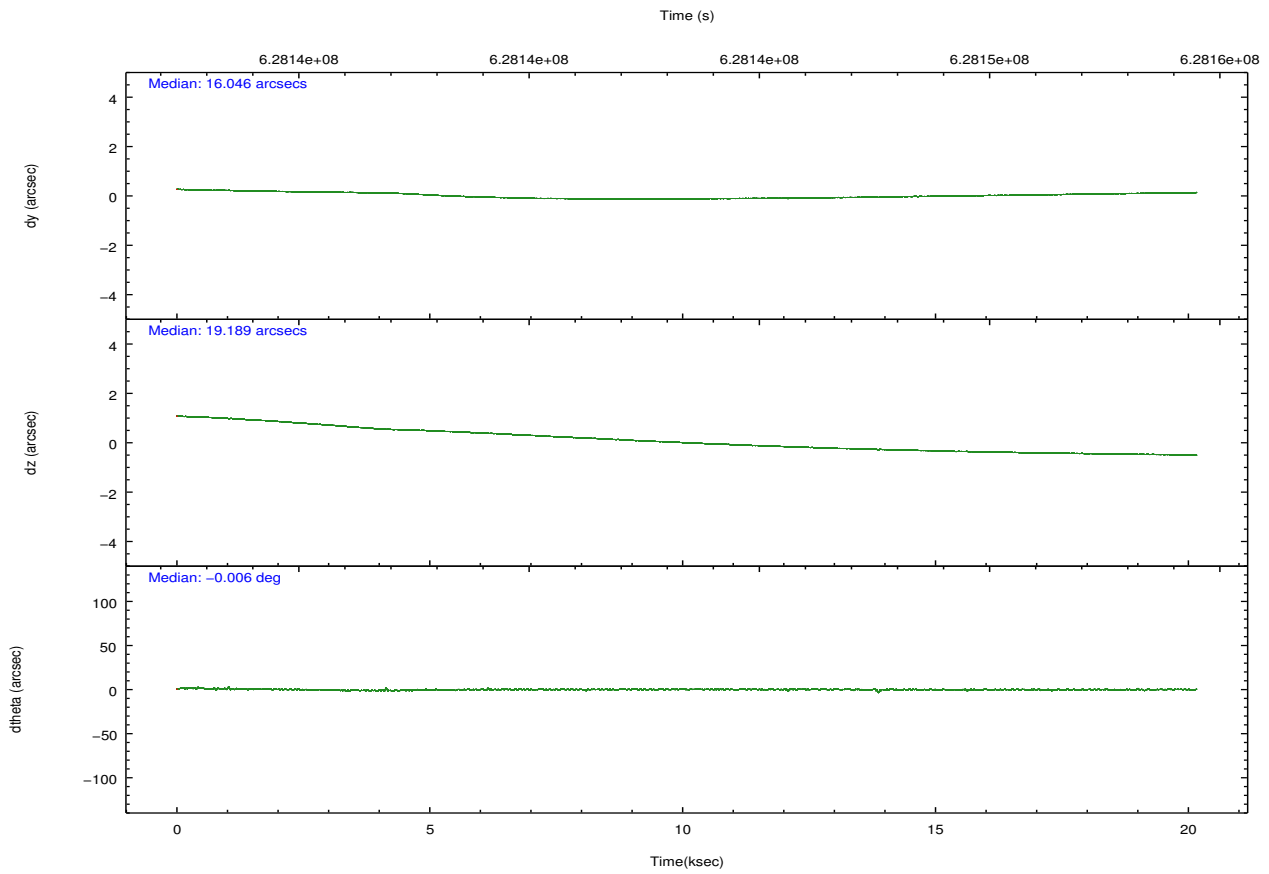
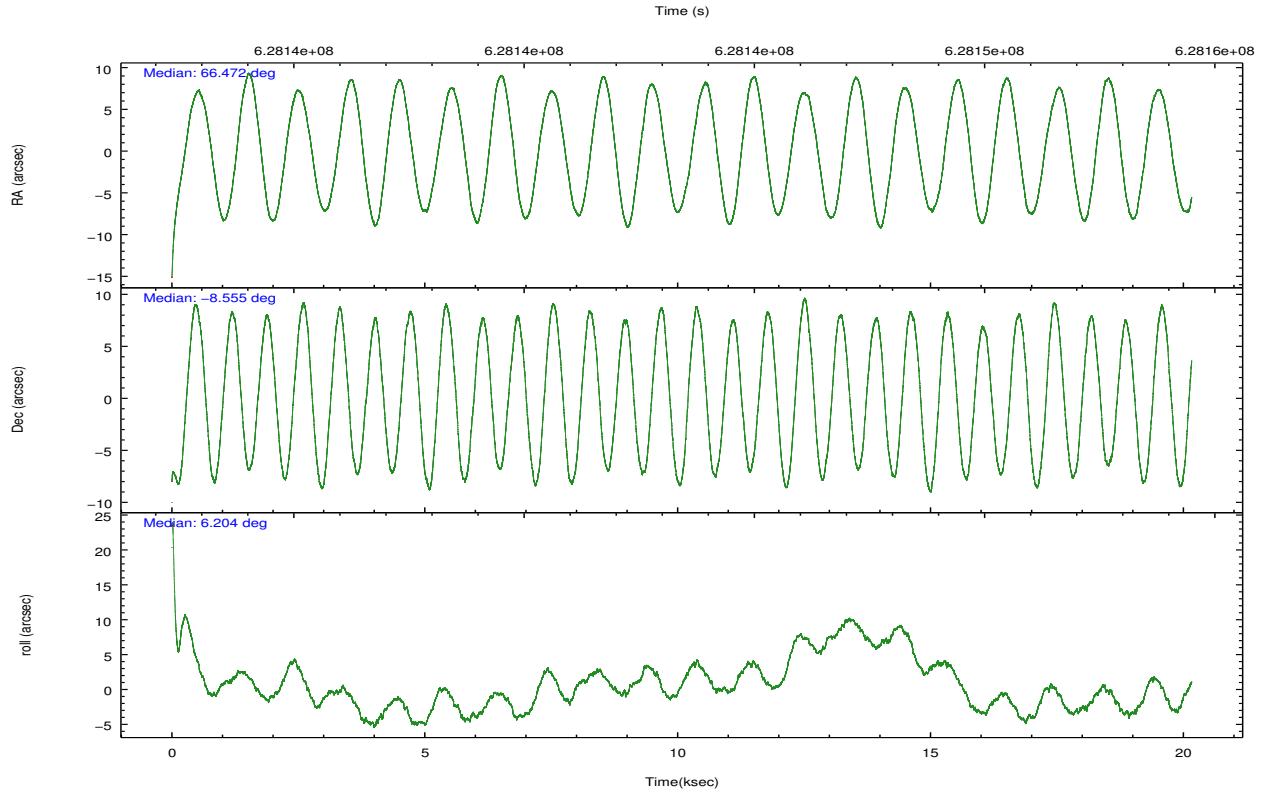
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	9358	11830	10828	21945	5456
	7%	8%	7%	14%	3%
grade 1 events	89	96	109	164	79
	0%	0%	0%	0%	0%
grade 2 events	4444	4819	4532	5366	3533
	3%	3%	3%	3%	2%
grade 3 events	1730	1790	1684	2116	1475
	1%	1%	1%	1%	1%
grade 4 events	1640	1695	1681	2112	1562
	1%	1%	1%	1%	1%
grade 5 events	5033	5374	4770	5876	5394
	4%	3%	3%	3%	3%
grade 6 events	3022	3584	2911	3369	3171
	2%	2%	2%	2%	2%
grade 7 events	99266	106991	118280	112056	118216
	79%	78%	81%	73%	85%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	66.449408	66.47185375657024	CCD I2 on	Y	Y
[deg] Pointing Dec	-8.571019	-8.554650857061102	CCD I3 on	Y	Y
[deg] Pointing Roll	5.997798	6.209839510537133	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	628133503.184000	628132243.04961	CCD S5 on	N	N
Observation start date	2017-11-27T01:30:34	2017-11-27T01:10:43	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	628153503.184000	628154309.25091	On-chip summing requested	N	N
Observation end date	2017-11-27T07:03:54	2017-11-27T07:18:29	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



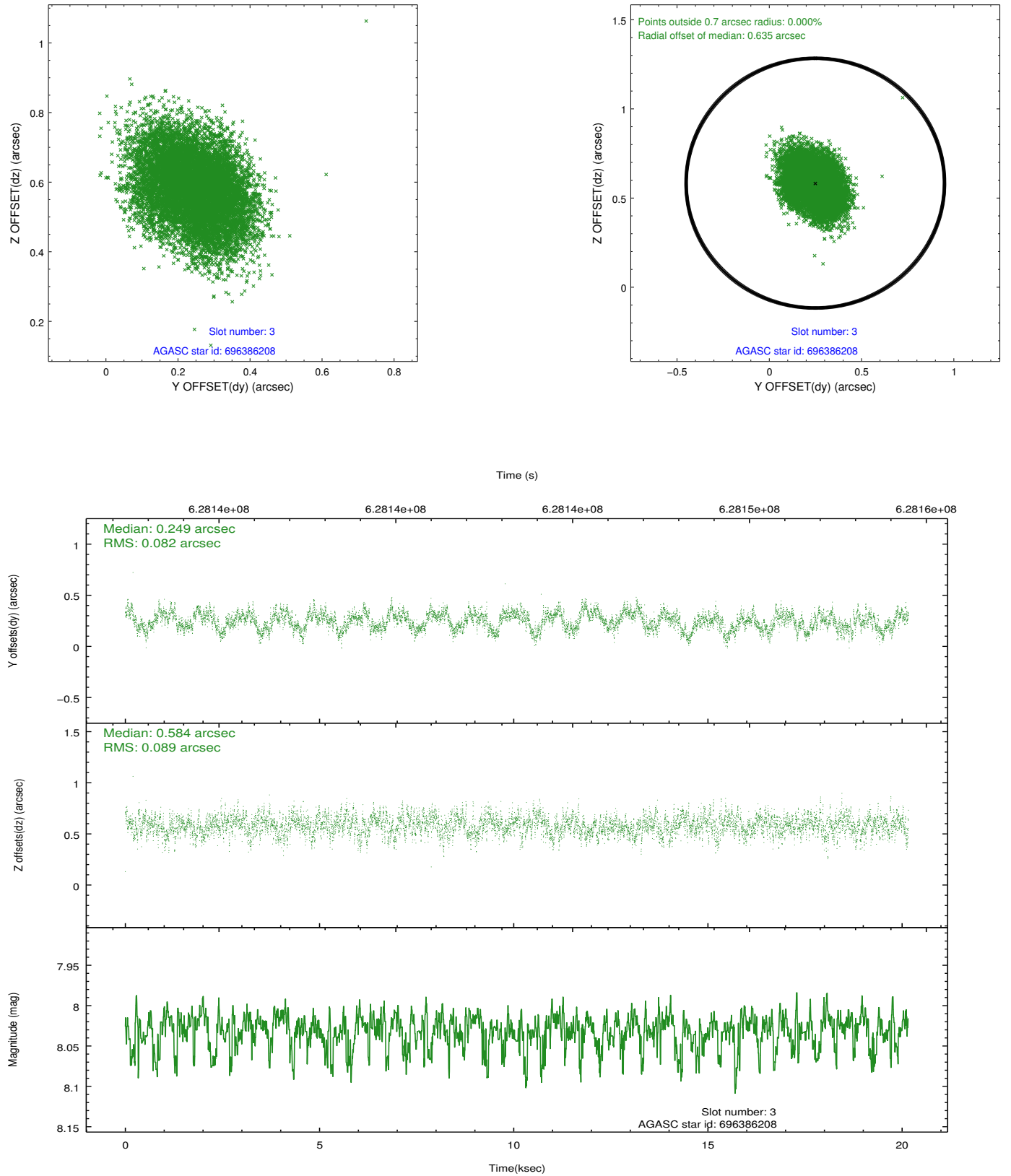


Slot Statistics

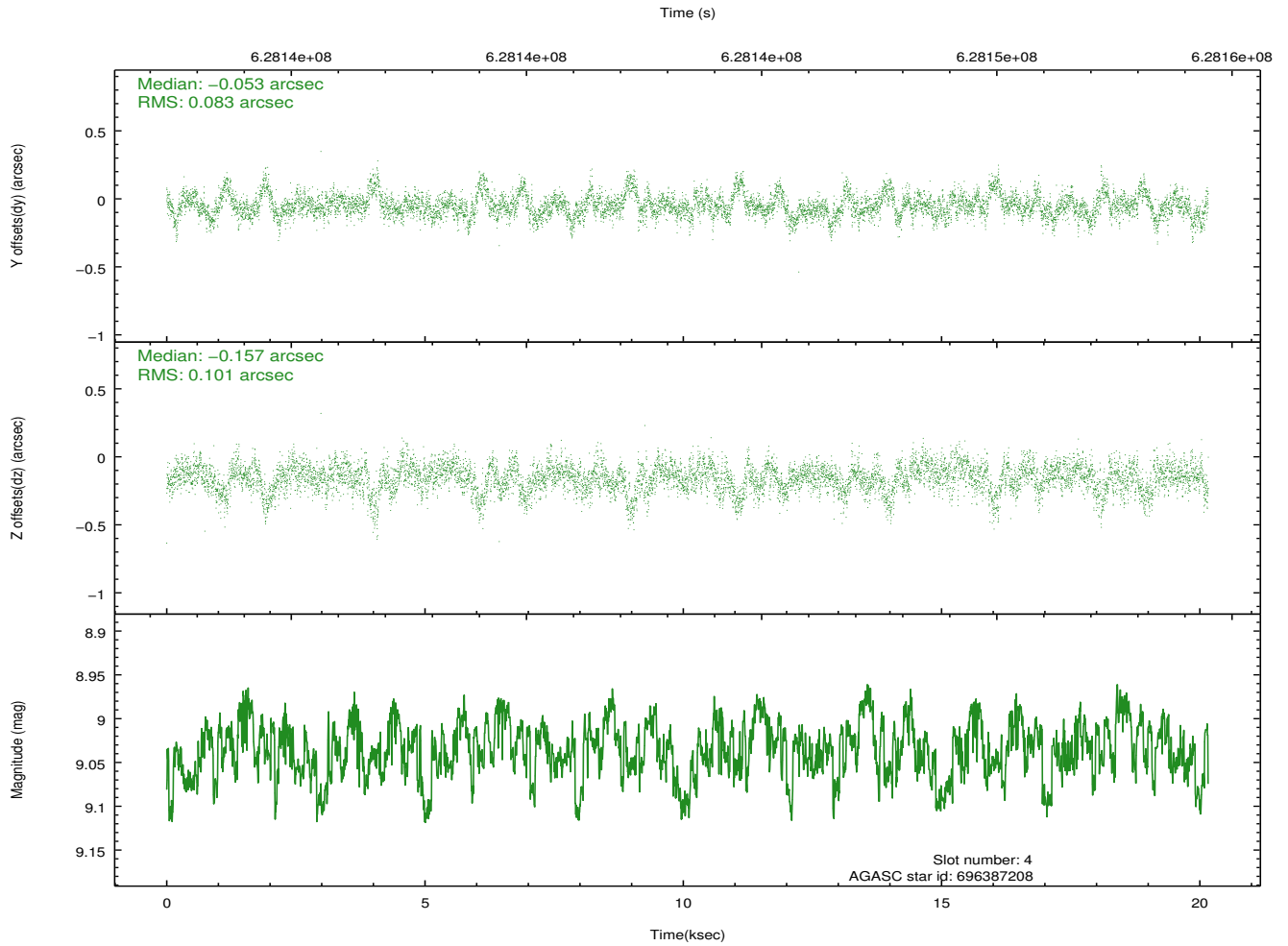
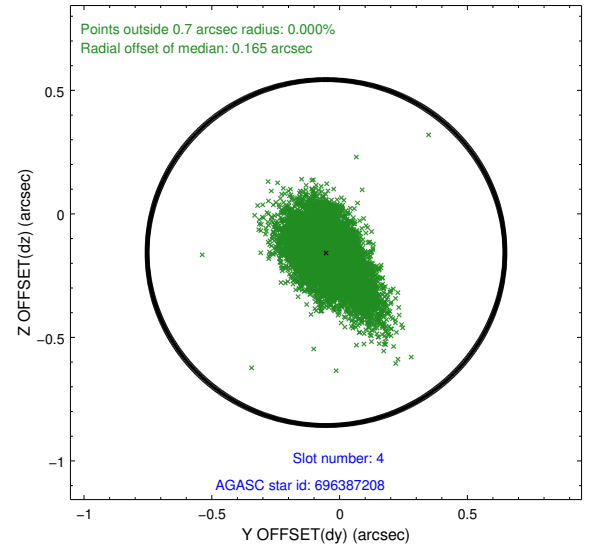
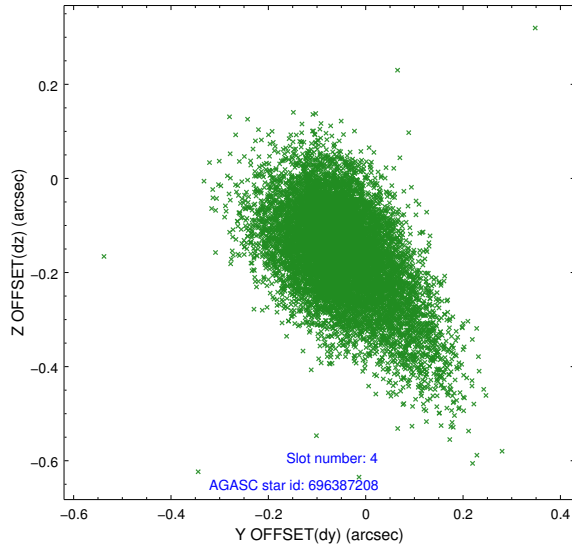
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.07	4919	0.041	0.003	0.011	0.033	0.000000	0.000000	923.46	-842.95
1	FID		ACIS-I-5	7.06	4919	-0.348	0.008	0.006	0.011	0.000000	0.000000	-1825.06	1054.28
2	FID		ACIS-I-6	7.07	4916	0.216	0.060	0.011	0.031	0.000000	0.000000	388.81	1699.19
3	GUIDE	used	696386208	8.03	9831	0.249	0.584	0.130	0.206	66.191076	-9.223516	-1157.69	-2239.99
4	GUIDE	used	696387208	9.04	9828	-0.053	-0.157	0.129	0.241	66.200801	-8.036400	-680.23	2006.13
5	GUIDE	used	696518688	9.26	9829	0.018	-0.174	0.208	0.317	66.849427	-8.392964	1484.11	488.26
6	GUIDE	used	696538136	8.93	9827	0.140	0.047	0.148	0.261	66.785429	-8.898543	1066.22	-1297.67
7	GUIDE	used	696522872	8.02	9831	-0.366	-0.284	0.094	0.164	66.882030	-8.191582	1675.73	1196.43

2.4 Star Slots

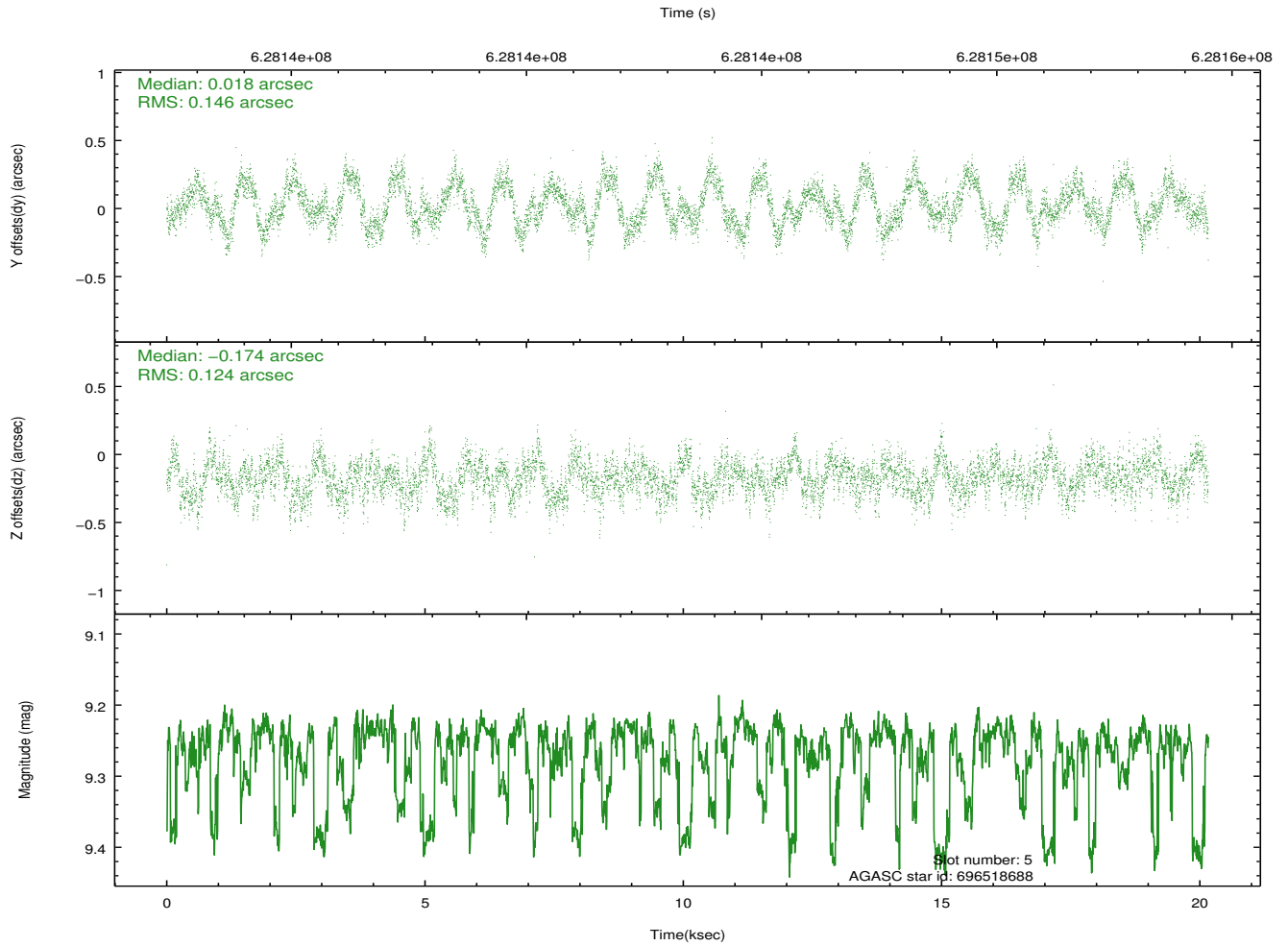
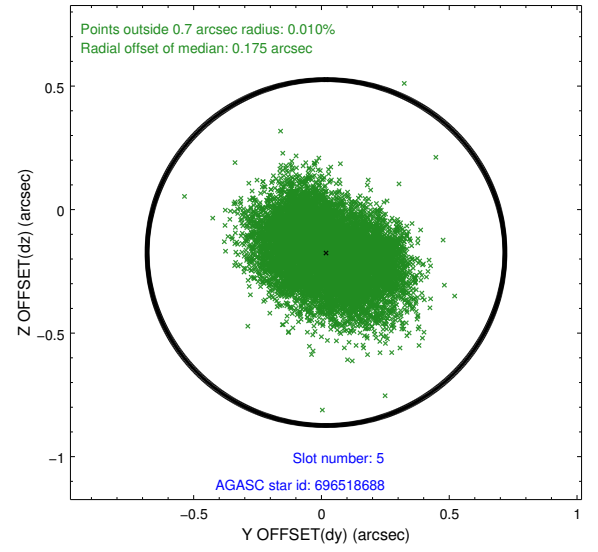
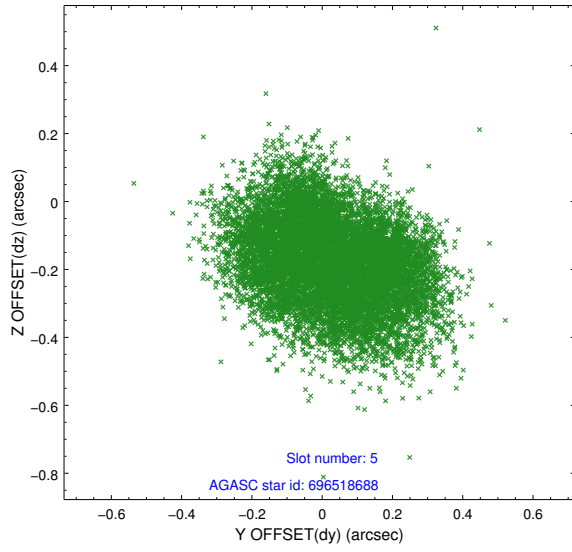
2.4.1 Slot 3



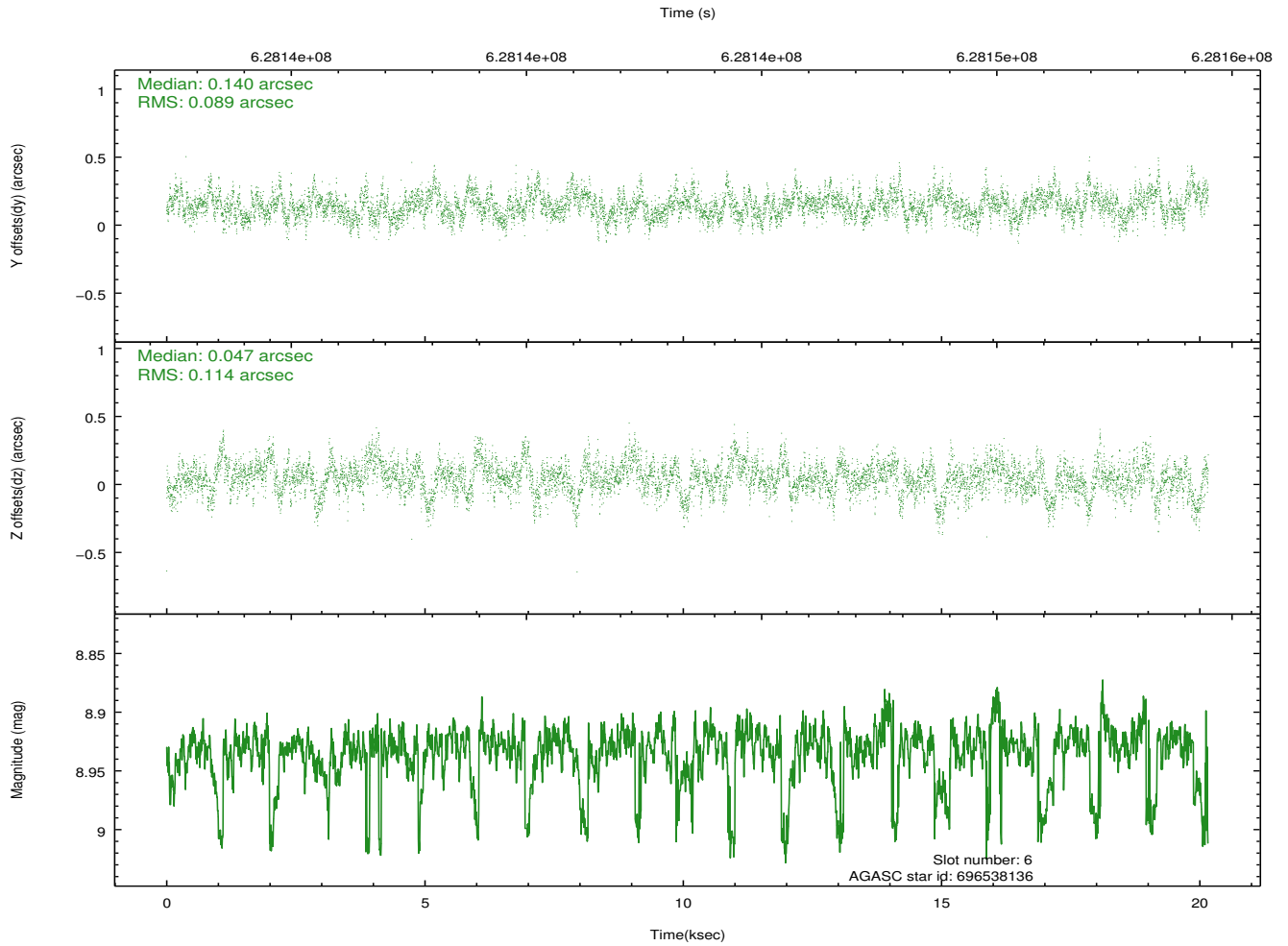
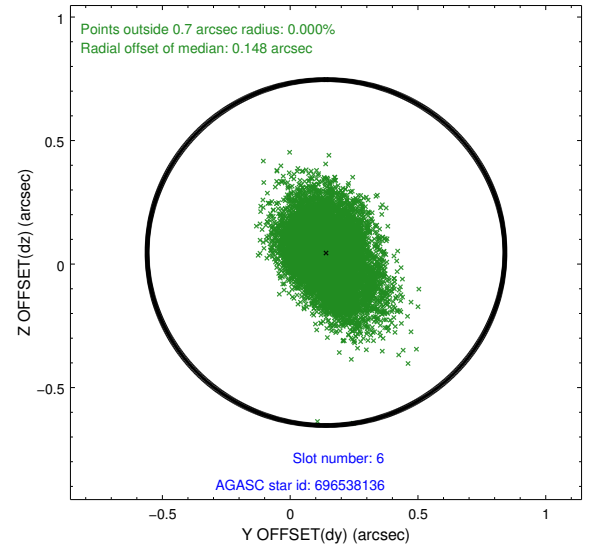
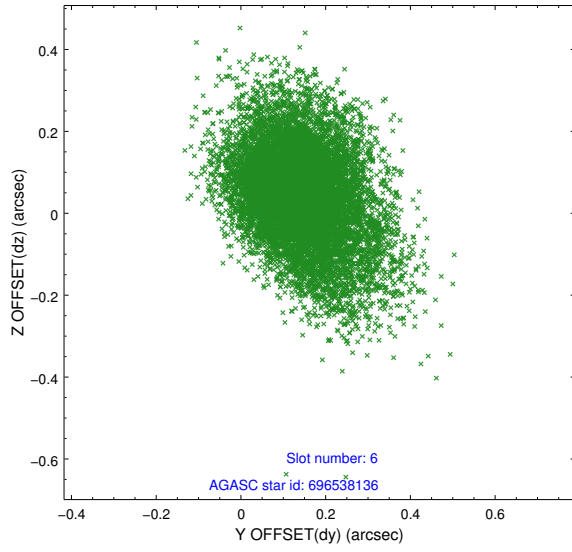
2.4.2 Slot 4



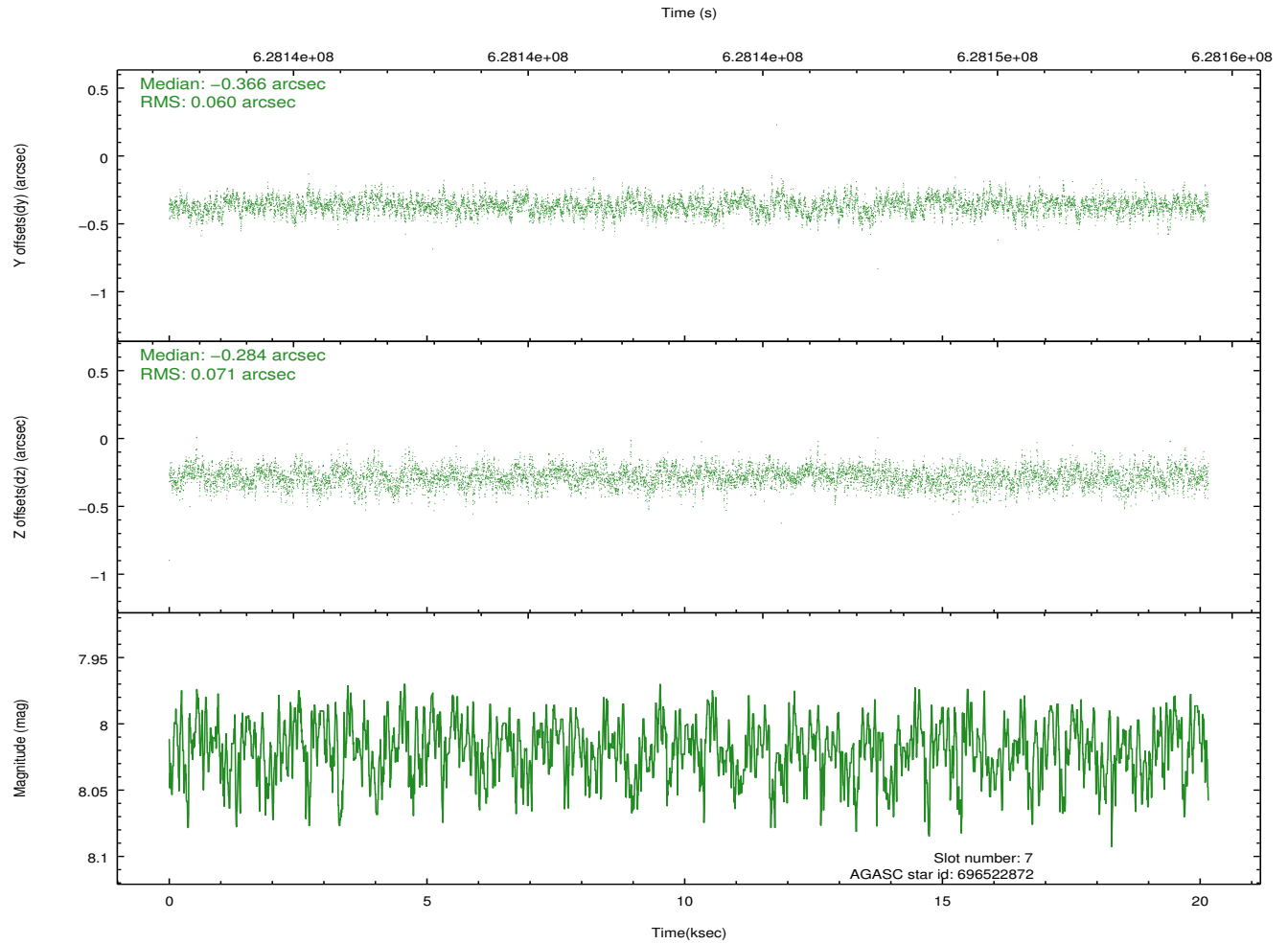
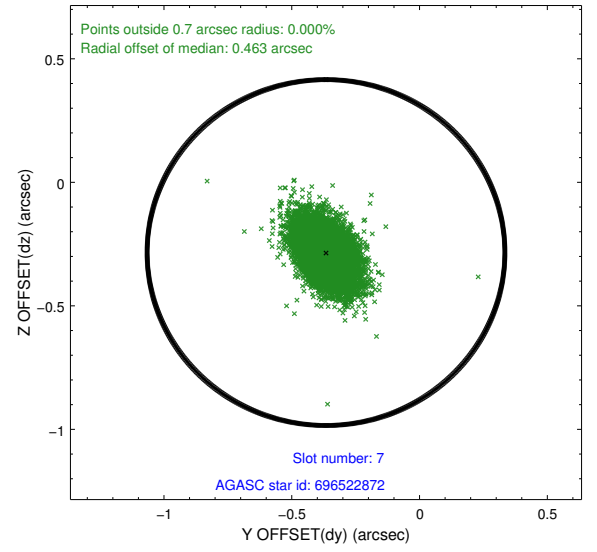
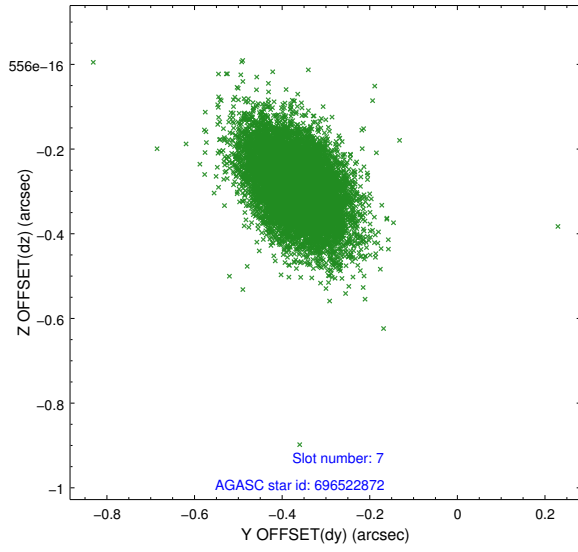
2.4.3 Slot 5



2.4.4 Slot 6

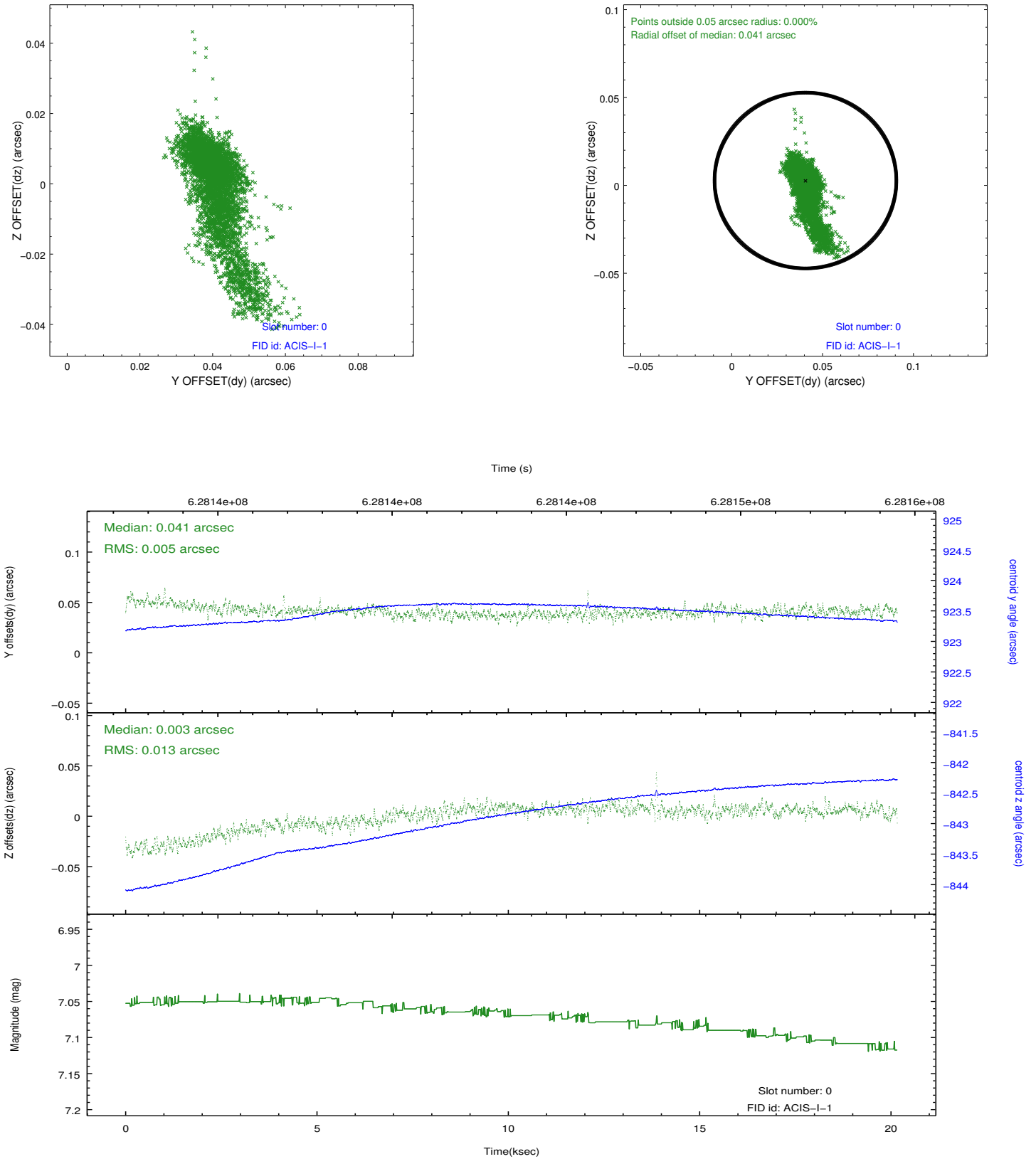


2.4.5 Slot 7

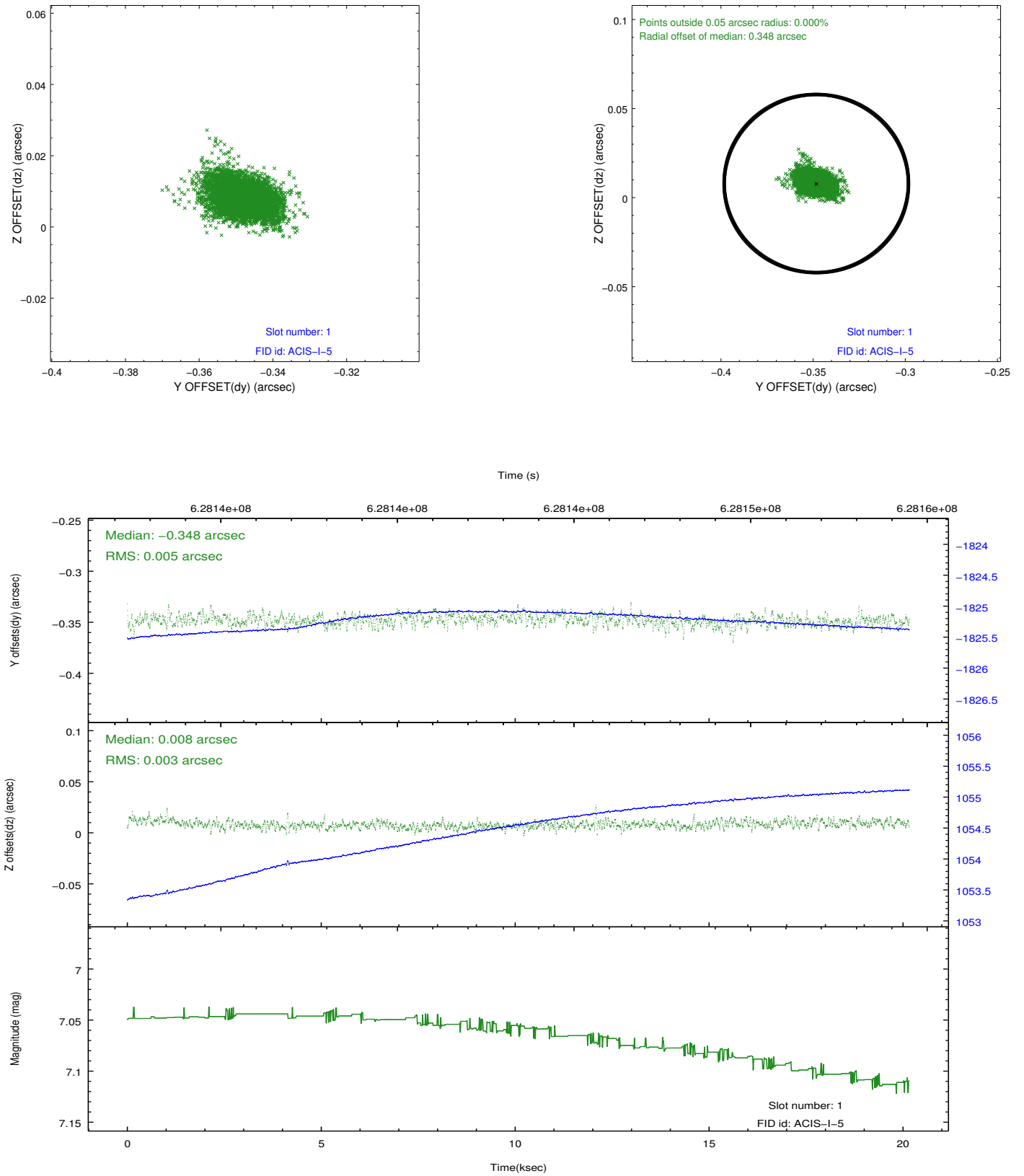


2.5 FID Slots

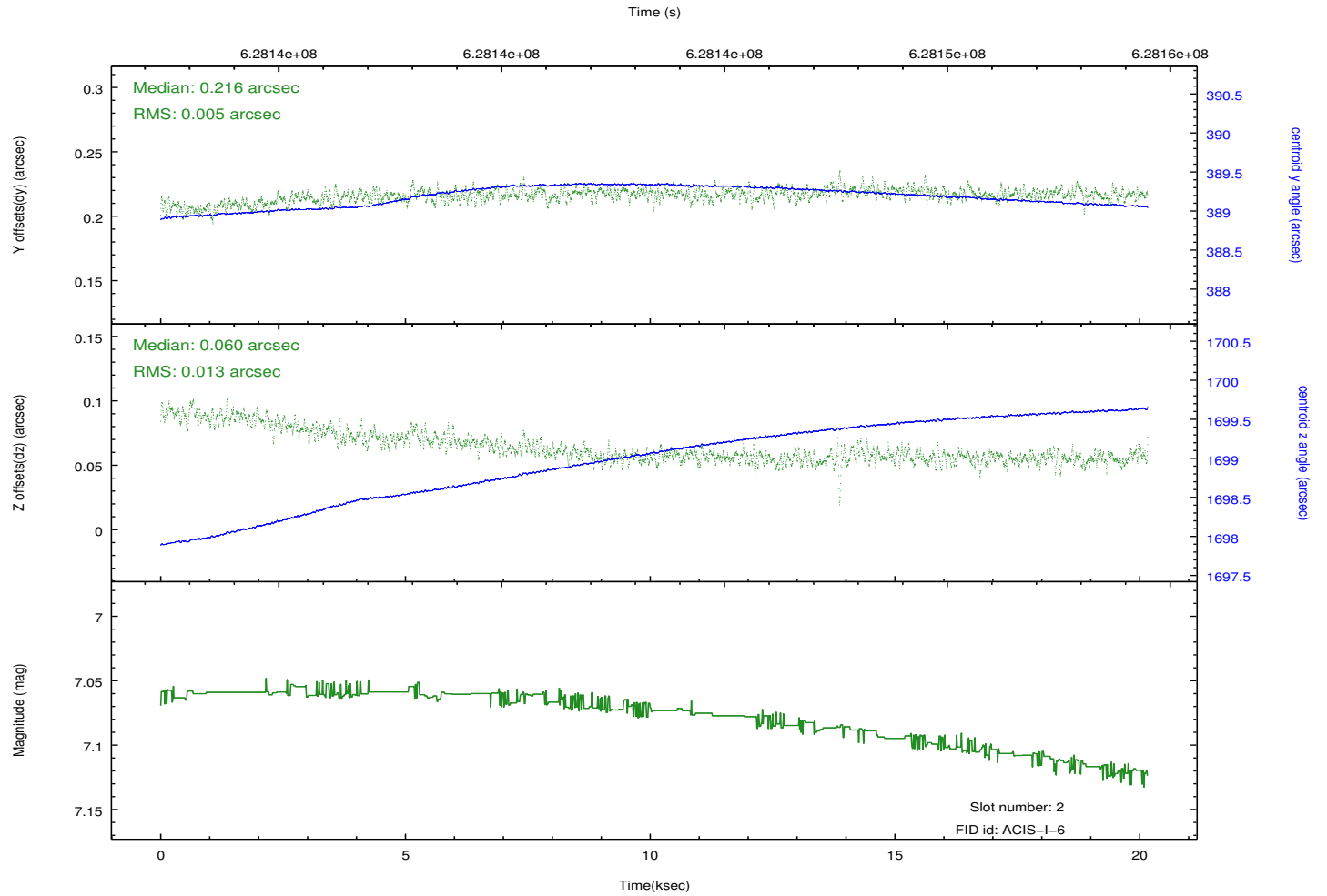
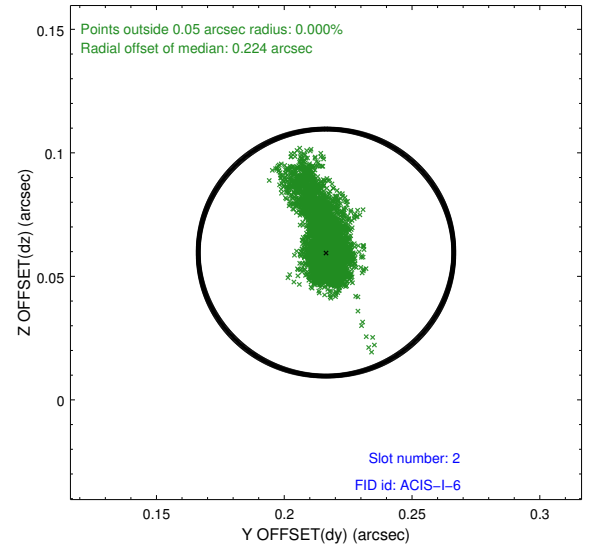
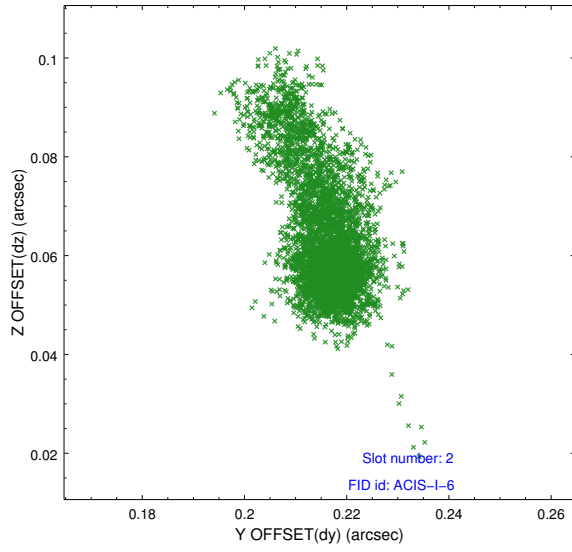
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2017.11.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.063159124255

A.2 Comments

Optional chip S3 not included.